

CLAIMS

What is claimed is:

1. An isolated Ma family polypeptide, or a functional derivative or fragment thereof.
- 5 2. Isolated Ma family polypeptide of Claim 1, wherein the polypeptide comprises an amino acid sequence selected from the group consisting of: SEQ ID NO:4, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, and SEQ ID NO:13.
- 10 3. An isolated fusion protein comprising a Ma family polypeptide.
- 10 4. The fusion protein of Claim 3, wherein the Ma family polypeptide comprises an amino acid sequence selected from the group consisting of: SEQ ID NO:4, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, and SEQ ID NO:13.
- 15 5. Isolated nucleic acid molecule which encodes a Ma family polypeptide or a functional derivative or fragment thereof.
- 15 6. Isolated nucleic acid molecule of Claim 5, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of: SEQ ID NO:3, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, and SEQ ID NO:12.
- 20 7. A DNA construct comprising the isolated nucleic acid molecule of Claim 5, operatively linked to a regulatory sequence.
- 20 8. A recombinant host cell comprising the isolated nucleic acid molecule of Claim 5, operatively linked to a regulatory sequence.

9. A method for preparing a Ma family polypeptide, or an active derivative or fragment thereof, comprising culturing the recombinant host cell of Claim 8.
10. An antibody, or antigen-binding fragment thereof, which selectively binds to the isolated Ma family polypeptide of Claim 1, or an active derivative or fragment thereof.